



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,785	08/19/2003	Charles Hsu	BHT-3230-65	3711

7590 10/19/2004

TROXELL LAW OFFICE PLLC
SUITE 1404
5205 LEESBURG PIKE
FALLS CHURCH, VA 22041

EXAMINER

NGUYEN, TU MINH

ART UNIT PAPER NUMBER

3748

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/642,785

Applicant(s)

HSU, CHARLES

Examiner

Tu M. Nguyen

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 3-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Sato et al. (U.S. Patent 5,902,971).

Re claim 1, as shown in Figure 1, Sato et al. disclose a structure of engine exhauster, comprising a front case (31), a board (40), and a rear case (32); wherein the front case has an opening (27), the rear case has a hole (60), exhaust gas passes through the board combined between the front case and the rear case, which is characterized in that:

a beehive portion (50) disposed in the board for exhausting the exhaust gas; a check valve (70) disposed in the front case for entering unidirectional secondary air; whereby, the exhaust gas from the front case is mixed up with the secondary air from the check valve of the front case, and then is exhausted from the hole of the rear case via the beehive portion of the board for further reducing air pollution.

Re claim 3, the beehive portion (50) in the structure of Sato et al. is in a columnar shape.

Art Unit: 3748

Re claim 4, a secondary air inlet (53) in the structure of Sato et al. is disposed in the front case for mounting a pipe (84), the pipe passes through the check valve (70) for entering unidirectional secondary air.

Re claim 6, in the structure of Sato et al., the secondary air inlet (53) is disposed on an exhaust manifold (31) for mounting a pipe (84), the pipe passes through the check valve (70) for entering unidirectional secondary air.

Re claim 5, a bending part (52) in the structure of Sato et al. is disposed in the board (40), an opening is disposed on the bending part, the beehive portion (50) is disposed above the bending part (52).

Re claims 7-8, the check valve (70) in the structure of Sato et al. is a guided check valve; wherein a check block of the check valve is a diaphragm (71).

Re claim 9, the structure of Sato et al. is suitable for a mowing machine, a blower, a chain saw, a power generator, a pump, and a lumber saw (lines 6-9 of column 1).

3. Claims 1, 3-5, 7, and 8 are further rejected under 35 U.S.C. 102(b) as being anticipated by Yamaki et al. (U.S. Patent 5,431,013).

Re claim 1, as shown in Figure 6, Yamaki et al. disclose a structure of engine exhauster, comprising a front case (7), a board (19), and a rear case (11); wherein the front case has an opening (9), the rear case has a hole (4), exhaust gas passes through the board combined between the front case and the rear case, which is characterized in that:

a beehive portion (21) disposed in the board for exhausting the exhaust gas; a check valve (32) disposed in the front case for entering unidirectional secondary air; whereby, the exhaust

Art Unit: 3748

gas from the front case is mixed up with the secondary air from the check valve of the front case, and then is exhausted from the hole of the rear case via the beehive portion of the board for further reducing air pollution.

Re claim 3, the beehive portion (21) in the structure of Yamaki et al. is in a columnar shape.

Re claim 4, a secondary air inlet in the structure of Yamaki et al. is disposed in the front case for mounting a pipe (31), the pipe passes through the check valve (32) for entering unidirectional secondary air.

Re claim 5, a bending part (20) in the structure of Yamaki et al. is disposed in the board (19), an opening is disposed on the bending part, the beehive portion (21) is disposed above the bending part (20).

Re claims 7-8, the check valve (32) in the structure of Yamaki et al. is a guided check valve; wherein a check block of the check valve is a board (34).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3748

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. or Yamaki et al. as applied to claim 1 above, in view of design choice.

The structure of Sato et al. or Yamaki et al. discloses the invention as cited above, however, fails to disclose that the beehive portion is wound in a cylindrical shape.

Sato et al. or Yamaki et al. disclose the claimed invention except for specifying a cylindrical shape for the beehive portion. It would have been an obvious matter of design choice to wind the beehive portion in Sato et al. or Yamaki et al. into a cylindrical shape, since such a modification would have involved a mere change in the shape of a component. A change in shape is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Prior Art

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of six patents: Court (U.S. Patent 3,031,824), Lentz et al. (U.S. Patent 3,338,682), Garcea (U.S. Patent 3,910,040), Noguchi et al. (U.S. Patent 3,981,145), Luercho (U.S. Patent 6,532,735), and Glover (U.S. Patent 6,789,385) further disclose a state of the art.

Art Unit: 3748

Communication

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Tu Nguyen whose telephone number is (703) 308-2833 or (571) 272-4862 to be effective on November 24, 2004.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas E. Denion, can be reached on (703) 308-2623 or (571) 272-4859 to be effective on November 24, 2004. The fax phone number for this group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1148.

Tu M. Nguyen

TMN

Tu M. Nguyen

October 17, 2004

Patent Examiner

Art Unit 3748